

What is claimed is:

- 5        1. An emergency release device (4) for a building closure operator (2) for decoupling a motorized building closure from a motor operator assembly (6, 9) under emergency conditions, comprising a safety or securing means (24) safeguarding or securing said emergency release device (4) against unintentional or unauthorized actuation.
- 10      2. The emergency release device as set forth in claim 1, wherein defeating said safety or securing means (24) and/or accessing said safety or securing means (24) for defeating are possible only in making use of a tool, a key or in destroying an element.
- 15      3. The emergency release device as set forth in any of the preceding claims, wherein it is actuatable in any position of said building closure.
- 20      4. The emergency release device as set forth in any of the preceding claims, comprising a mechanical actuating means (14) for manual movement to actuate said emergency release device (4).
- 25      5. The emergency release device as set forth in any of the preceding claims, comprising a linking transmission means (16) for linking an actuating means (14) to a coupling means (11) which releasably couples said building closure to said motor operator assembly (6/9) and transmitting a movement of said actuating means (14) to said coupling means (11) for releasing same.
- 30      6. The emergency release device as set forth in any of the preceding claims, wherein said safety or securing means (24)
  - blocks movement of said actuating means (14) or/and

- blocks access to said actuating means (14) or/and
- blocks or disconnects said linking transmission means (16).

7. The emergency release device as set forth in any of the preceding  
5 claims, wherein said actuating means (14) comprises a mount (20)  
by means of which it can be located for facilitated access by a  
user, and comprising a manual actuator (22) movable relative to  
said mount (20) for actuating said emergency release device (4).

10 8. The emergency release device as set forth in claim 7 and claim 2,  
wherein said safety or securing means (24) comprises a blocking  
member (58) which blocks movement of or access to said manual  
actuator (22) and defeats same only by making use of a tool, key  
or/and destruction of the blocking member.

15 9. The emergency release device as set forth in claim 8, wherein said  
blocking member is or comprises a screw fastener, particularly a  
cap screw, more particularly a hexagon cap screw (58).

20 10. The emergency release device as set forth in any of the preceding  
claims, wherein it is mechanically biased in a normal operating position  
in which said building closure is coupled to said motor operator  
assembly (9/6) and actuatable in defeating said bias by means of  
said actuating means (14).

25 11. The emergency release device as set forth in claim 10, wherein  
said linking transmission means (16) comprises a spring assembly  
(27) for biasing said emergency release device (4) in said normal  
operating position.

30

12. The emergency release device as set forth in claim 10 or 11, comprising a retaining means (38) by means of which said actuating means (14) can be fixed in an actuating position against said bias.

5        13. The emergency release device as set forth in any of the preceding claims, wherein said actuating means (14) comprises a pull handle (22) as said manual actuator which is connected to a traction member (32) of said linking transmission means (16).

10      14. The emergency release device as set forth in claim 7 and claim 9, wherein said blocking member is a cap screw (58) defining said manual actuator (22) on said mount (20) of said actuating means (14).

15      15. The emergency release device as set forth in claim 14, wherein said manual actuator (22) and/or said mount (20) is provided with a tapped hole or a clamping portion for receiving said cap screw (58) acting as said blocking member.

20      16. The emergency release device as set forth in claim 5 or in any of the claims 6 to 15, where relating back to claim 5, wherein said coupling means (11) is arranged in a transmission case (8, 7) of a jack-shaft operator (2) and couples a self-locking gearing (9) of said jack-shaft operator (2) to a driven shaft (10) of said jack-shaft operator (2).

25      17. The emergency release device as set forth in claim 5 or in any of the claims 6 to 16, where relating back to claim 5, wherein said linking transmission means (16) comprises a bowden cable (26) including a traction member, especially a cable wire (32), guided in a sheath (34).

30

18. The emergency release device as set forth in claim 11 and claim 17, wherein said spring assembly (27) is provided at one end of said bowden cable (26) and biases said traction member (32) relative to said sheath (34).

5

19. The emergency release device as set forth in claim 7 and claim 12 or in any of the claims 13 to 18, where relating back to claim 7 and claim 12, wherein said mount (20) comprises a fastening member (40) for fixing in situ and said retaining means (38) secured to said fastening member (40) in an optionally settable arrangement.

10

20. The emergency release device as set forth in claim 12 or 19 and claim 17 or 18, wherein said retaining means (38) comprises a U-shaped supporting element (41) with two legs (42, 43) and a web (44) inbetween, said one leg (42) having a receiving means (46) for said bowden cable and said other leg (43) having a receiving means (46) in which said manual actuator (22) translated into said actuating position can be fixed in place.

15

20

21. The emergency release device as set forth in claim 19 and 20, wherein said web (44) of said supporting element (41) and said fastening member (40) can each be engaged with the other shiftable relative to each other and fixed in place relative to each other by means of a fastener (54).

25

30

22. The emergency release device as set forth in claim 21 and claim 9 or 14, wherein said fastener (54) comprises an adapter, more particularly a sleeve (56) having two tapped holes, one of which receives a screw (55) locating said supporting element (41) relative to said fastening member (40) and the other receives said cap screw (58) acting as the safety member of said safety means (24) for securing said manual actuator (22) to said adapter (56).

23. The emergency release device as set forth in any of the preceding claims, wherein said mount (20) is suitable optionally for left-hand mounting in which it is accessible from the left-hand side or right-hand mounting in which it is accessible from the right-hand side on a door jamb of a building or site closure or overhead.

5

24. The emergency release device as set forth in any of the preceding claims, wherein said supporting element (41) of said mount (20) is configured symmetrically about a centerline running transversely to its longitudinal centerline.

10

25. The emergency release device as set forth in any of the preceding claims, wherein said fastening element (40) of said mount (20) is a bracket (48) having three walls (49 - 51) oriented at right angles to each other, on two of said three transitions between said walls (49 - 51) a passage opening (53) being formed for optional insertion of said supporting element (41) and on two (49, 50) of said walls (49 - 51) two openings (52) are configured optionally serving for wall mounting or for locating a safety member (58) of said safety means (24), and on the third wall (51) at least one opening (80) is provided for defining said linking transmission means (16).

15

20

26. A building closure operator (2) for operating a building closure or site closure comprising an emergency release device (4) as set forth in any of the preceding claims.

25

27. The building closure operator as set forth in claim 26, wherein it is configured as a jack-shaft operator (2) for fitting to a drive tube geared to a door leaf and comprising a motor (6), a self-locking gearing (9) connected thereto as a motor operator assembly, a driven shaft (10) and a coupling means (11) interposed between

30

said driven shaft (10) and said gearing (9) for release by means of a coupling lever (12).

28. An overhead door including a door leaf powered by a door operator  
5 (2) for movement overhead, comprising an emergency release device (4) as set forth in any of the preceding claims or a building closure operator configured as a door operator (2) as set forth in any of the preceding claims.

10

15

20